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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,383

Applicant(s)

DAVIS, ARLIN R.

Examiner

Hanh Nguyen

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 12/28/00.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 11-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1 is objected to because of the following informalities:

In claim 1, it is not clear what is meant by “reside on an Ethernet network to the network protocol”.

Is the “at least one remote peer node” on line 6 referred to the “at least one remote peer node” on line 4. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 and 19-22 are rejected under 35 USC 102(e) as being anticipated by **Slemmer et al.** (US Pat. No. 6,377,990 B1) in view of **Horikawa** (US pat. No. 6,389,021 B1).

In claims 1-4, 6, 10, 19 and 21, **Slemmer et al.** discloses, in Fig.1, a first computer such as work station 16 (a remote peer node) attempts to contact another computer such as ethernet network adapter 14(a first node). The first computer 16 (remote peer node) determines the Ethernet address (MAC address) that corresponds to the target Ip address by sending an address resolution protocol (ARP) message containing its IP address, its ethernet address and the target

IP address to the another computer 14 (receiving at a first node local identifier of one remote peer node). The ethernet adapters coupled to network 20 unpack the ARP message and pass on the message to the ethernet driver (LAN driver at fabric). The ethernet driver maps the target IP address to determine the ethernet address associated with the target IP address, and sends the ethernet address to the first computer (mapping the logical address to the ethernet address or the remote peer node). See col.4, lines 25-50. Since network adapters are ethernet adapters, therefore, the work stations are connected to the ethernet network 20 (remote peer node resides in ethernet network). **Slemmer et al.** does not disclose infiniband fabric. **Horikawa** discloses a LANE terminal 100a transmits MAC address to LANE terminal 100c via ATM switch 301(infiniband fabric), Therefore, it would have been obvious to one ordinary skill in the art to attach ATM fabric comprising ATM switches into **Slemmer et al.** so that an ethernet emulation can be performed over infiniband fabric.

In claims 7-9, **Slemmer et al.** does not disclose the ethernet address comprises a broadcast address, a multicast address and a unicast address to remote peer node. It has been a well-known skills in the art to understand that the ethernet packet is used in LAN to transmit Ip packets to a user, multi-users or a group of users.

In claim 20, **Slemmer et al.** does not disclose the ethernet address comprises 48 bits. It is a well-known in the art for the ethernet address which comprises 48 bits.

In claims 5 and 22, **Slemmer et al.** discloses IP address transmitted through network 20 (TCP/IP), but does not disclose the network protocol comprises netware, OSI, DECnet and AppleTalk. However, it is a wellknown skill in the art to use any of the netware, OSI, DECnet and AppleTalk because they are compatible.

Allowable Subject Matter

Claims 11-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claim 11, the prior art does not disclose transport service library (TSL) providing connection management, work queue management, memory management, and message pool management, the IB lan driver using the TSL to establish a connection with and perform transfers to the at least one remote peer node.

In claim 12, the prior art does not disclose the IB bus driver receiving each LID and a LID mask for each LID from the IB lan driver once the port is activated and assigning one LID to each at least one port.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rodrig et al. (US Pat. No. 6,256,314 B1) discloses Apparatus and Methods for Routerless Layer-3 Forwarding in a Network.

Liu et al. (US Pat. No. 6,574,664 B1) discloses Apparatus and Method for IP and Mac address Discovery at the Processing Layer.


Ortega et al. (US pat. No. 6,711,162 B1) discloses Method and Apparatus for Providing Proxy service, route selection, and protocol conversion for service endpoints within data networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 703 305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen


April 1, 2004